

AMENDMENTS

IN THE CLAIMS

Please cancel claims 5, 6, 8, 10 and 11 without prejudice.

Please amend claims 1, 7, 9, 40, 42, 48 and 50 as set forth below.

Complete Listing of the Claims

Upon entry of the present amendment, the claims will stand as follows:

1. (Currently Amended) A method of detecting a member of the taxa actinomycetes in a sample, comprising:

(a) sequentially incubating with ~~[[the]]~~ a sample containing a population of about 10⁴ cells of the taxa actinomycetes a thiol-selective reagent ~~to that~~ produces maleimidyl derivatives, a purified polyclonal antibody that ~~specifically~~ binds to the maleimidyl derivative of mycothiol derivative or a thiol-containing mycothiol component derivative, and a reagent for detecting binding of the antibody to sample components for a time sufficient for said antibody to react with said maleimidyl derivative of mycothiol derivative or said thiol-containing mycothiol component derivative; and

(b) detecting binding of the antibody with said maleimidyl derivative of mycothiol derivative or said thiol-containing mycothiol component derivative, ~~wherein the binding indicates~~ to indicate the presence of a member of the taxa actinomycetes in the sample.

2. (Previously Presented) The method of claim 1, wherein said member of the taxa actinomycetes is mycobacteria.

3. (Original) The method of claim 1, wherein said sample is selected from the group consisting of a blood sample, a serum sample, a urine sample, a fecal sample, a tissue biopsy, cerebrospinal fluid sample, ascites samples, pleural fluid sample, respiratory secretions, and a sputum sample.

Claims 4-6. (Cancelled).

7. (Currently Amended) The method of claim 1, further comprising
(c) quantitating said maleimidyl derivative of mycothiol ~~derivative or said thiol-~~
~~containing mycothiol component derivative~~ in the sample.

8. (Cancelled)

9. (Currently Amended) An isolated polyclonal antibody which binds to mycothiol
~~or a thiol-containing mycothiol component~~.

Claims 10 and 39 (Cancelled)

40. (Currently Amended) A kit useful for detecting the presence of mycothiol ~~or~~
~~thiol-containing mycothiol component~~ in a sample, the kit comprising: carrier means being
compartmentalized to receive in close confinement therein one or more containers comprising a
container containing ~~[[an]]~~ a polyclonal antibody ~~specific for that binds to a maleimidyl~~
derivative of mycothiol ~~or a thiol-containing mycothiol component~~ to detect mycothiol ~~or thiol-~~
~~containing mycothiol component~~ in the sample.

Claim 41 (Cancelled)

42. (Currently Amended) The kit of claim 40, further comprising a container
containing a detection reagent to detect the reaction of the maleimidyl derivative of mycothiol ~~or~~
~~thiol-containing mycothiol component~~ with said antibody to detect the presence of mycothiol ~~or~~
~~thiol-containing mycothiol component~~.

Claims 43-47 (Cancelled)

48. (Currently Amended) The method of claim 1, wherein said detection of binding
of the antibody with the mycothiol derivative comprises using a detection reagent is directly
labeled with a label.

49. (Previously Presented) The method of claim 48, wherein said label is selected
from a fluorophore, a chromophore, a luminophore, a ferritin, a heavy metal and a radioactive
label.

In re Application of:

Fahey et al.

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50. (Currently Amended) The method of claim 49, wherein said enzymatic label is selected from horseradish peroxidases, urease, luciferase and alkaline phosphatase.